

**Listing and Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application, claims 2, 7 and 10 are cancelled:

1. (currently amended) A serial compressed bus interface, comprising:  
a serial-to-parallel converter having a single serial data input line adapted to receive time-division multiplexed serial data from a plurality of data sources, and having a plurality of parallel output lines for providing thereon a packet of said time-division multiplexed serial data in parallel form to one of a plurality of devices associated with data applications; and

enable logic coupled to each of said plurality of devices and adapted to ~~[[input]]~~ provide at least one data valid signal that identifies ~~[[each]]~~ which of said a plurality of ~~data consumers for which the time-division multiplexed serial data is valid~~ devices are associated with a particular packet of said time-division multiplexed serial data.

2. (canceled)

3. (currently amended) The serial compressed bus interface according to claim 1, further comprising a request control circuit adapted to output at least one request signal that requests the time-division multiplexed serial data for at least one of the plurality of ~~[[data consumers]]~~ devices associated with data applications.

4. (currently amended) The serial compressed bus interface according to claim 3, further comprising at least one encoder adapted to encode at least one of the at least one data valid signal and the at least one request signal to correspond to more than one of ~~the plurality of data consumers~~ said plurality of devices associated with data applications.

5. (currently amended) The serial compressed bus interface according to claim 3, wherein the request control circuit is further adapted to encode the at

least one request signal to correspond to more than one of ~~the plurality of data consumers~~ said plurality of device associated with data applications.

6. (currently amended) A method for transmitting serial compressed data from a plurality of data sources to a plurality of ~~[[data consumers]]~~ devices associated with data applications, comprising the steps of:

time-division multiplexing the serial compressed data from the plurality of data sources to generate time-division multiplexed serial compressed data onto a single data line;

converting the time-division multiplexed serial data to a packet of parallel data, and outputting said packet of parallel data for receipt by at least one of said plurality of devices associated with data applications; and

providing at least one data valid signal that identifies which of said plurality of devices are associated with said outputted packet of parallel data.

~~and transmitting the time-division multiplexed serial compressed data to the plurality of data consumers.~~

7. (canceled)

8. (currently amended) The method according to claim 6, further comprising the step of encoding a data valid signal to indicate that the time-division multiplexed serial compressed data is valid for more than one of ~~the plurality of data consumers~~ said devices associated with data applications.

9. (currently amended) The method according to claim 6, further comprising the step of encoding a request signal to indicate that the time-division multiplexed serial compressed data is requested by more than one of ~~the plurality of data consumers~~ said devices associated with data applications.

10. (canceled).